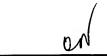


## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,862	03/25/2002	Georg Matheis	1884	6217
75	90 06/17/2004		EXAM	INER
Striker Striker	& Stenby		DEAK, L	ESLIE R
103 East Neck I Huntington, NY			ART UNIT	PAPER NUMBER
Tuntington, 14	1 11745		3762	
			DATE MAILED: 06/17/200	4 (p

Please find below and/or attached an Office communication concerning this application or proceeding.

·		
	Application No.	Applicant(s)
	10/019,862	MATHEIS, GEORG
Office Action Summary	Examiner	Art Unit
	Leslie R. Deak	3762
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	e correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a report of the period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be oly within the statutory minimum of thirty (30) of I will apply and will expire SIX (6) MONTHS fro te, cause the application to become ABANDO	timely filed days will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133).
Status		
<ul> <li>1) ⊠ Responsive to communication(s) filed on 25 / 2a) □ This action is FINAL.</li> <li>2b) ⊠ This 3) □ Since this application is in condition for allowed closed in accordance with the practice under</li> </ul>	is action is non-final. ance except for formal matters, p	
Disposition of Claims		
4) ☐ Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3 is/are rejected. 7) ☐ Claim(s) 4-9 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/	awn from consideration.	
9) The specification is objected to by the Examin	er.	
10) ☐ The drawing(s) filed on 25 March 2002 is/are:  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the E	e drawing(s) be held in abeyance. { ction is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
a) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority documer application from the International Burea * See the attached detailed Office action for a list	nts have been received. nts have been received in Applic ority documents have been rece au (PCT Rule 17.2(a)).	ation No. <u>PCT/EP00/04045</u> . ived in this National Stage
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)	4) ☐ Interview Summ	ary (PTO-413)
<ul> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ul>	Paper No(s)/Mai	

Application/Control Number: 10/019,862 Page 2

Art Unit: 3762

## **DETAILED ACTION**

## Claim Objections

1. Claims 4-9 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5.464,388 to Merte et al in view of US 5,702,358 to Witherspoon et al. Merte discloses a variable ratio cardioplegia device with a mixing system 106 and a displacement pump 104 that is connected to a recirculation line 126 for recirculation of the cardioplegia mixture. The device includes a blood source and a cardioplegia source 114 and blood source 122 that are mixed via valves and solenoids that are operated by means of a controller 148 that controls the operation of the solenoids to provide a deteremined fluid mixture. (See FIG 5, column 5.) Merte fails to disclose that the blood and cardioplegia supply is controlled by chamber wheels or pumps. Witherspoon discloses a variable ratio cardioplegia delivery device with circular roller pumps disposed on each supply tube, allowing the ratio of blood to cardioplegia solution to be controlled according to

Application/Control Number: 10/019,862

Art Unit: 3762

Page 3

operator desire via pressure or flow rate measurements. Therefore, it would have been

obvious to one of ordinary skill in the art at the time of invention to substitute the pinch

valves of the Merte device with the roller pumps of the Witherspoon device so that the

controller may control the flow rate of the fluids to be combined, as taught by

Witherspoon.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure

a. US 5,358,481

Todd et al

i. Cardioplegia mixing device with recirculation

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Leslie R. Deak whose telephone number is 703-305-

0200. The examiner can normally be reached on M-F 7:30-5:00, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Angela Sykes can be reached on 703-308-5181. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3 June 2004

ANGELA D. SYKES SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700

Cingil, D. Ash,